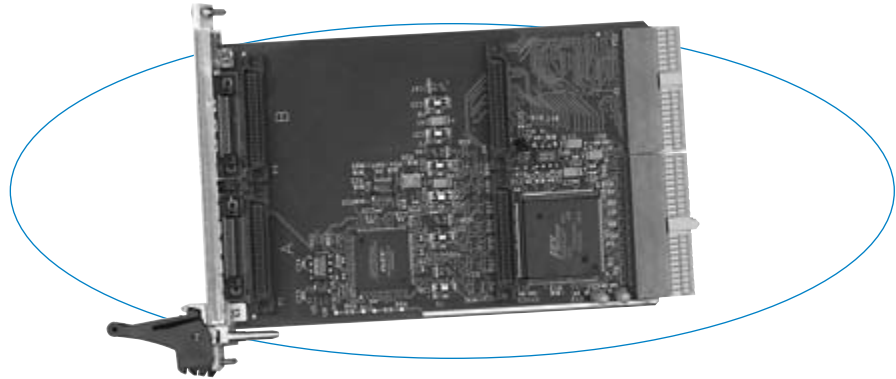


AcPC8635 CompactPCI®, Nonintelligent, 3U IP Carrier Card



The AcPC8635 is a nonintelligent slave board that interfaces two IP modules to the CompactPCI® (cPCI) bus. All 100 I/O points are brought out the rear J2 connector. This convenience eliminates messy cables from hanging out the front of the cage. In addition to a more efficient cage wiring design, it is also much easier to insert and replace boards.

Features

- Two industry-standard IP module slots
- Board resides in memory space
- Supports IP module I/O, ID and INT spaces
- 100 I/O points with rear access
- High-density rear connectors
- Compatible with 32-bit CompactPCI® backplane
- Plug-and-play carrier configuration and interrupt support
- Two interrupt channels per IP module
- Front panel LEDs
- Supervisory circuit for reset generation
- Individually filtered and fused power to each IP
- Ruggedized with ESD strip and EMC front panel
- ActiveX/OLE controls available for easy software integration (sold separately)

Benefits

- Clean system cabling.
- Easy board replacement as I/O needs change.
- Simplified debugging with status LEDs.
- Quick development of custom I/O boards.
- Flexibility to mix and match I/O functions as requirements change.

Mix and match plug-in modules with different I/O functions to quickly create custom I/O boards.

Operation

Acromag's carrier boards provide full data access to the IP module's I/O, ID and interrupt spaces. With full access to the programmable registers, you can easily configure and control the operation of the IP modules from the cPCI bus.

Up to two interrupt requests are supported for each IP module. All board interrupts are mapped to PCI bus INTA# signal.

Individual passive filters on each IP power supply line provide optimum filtering and noise isolation between the IP modules and the carrier board.

Specifications

IP Compliance (ANSI/VITA 4)

Meets IP specs per ANSI/VITA 4-1995 (8MHz operation only) and IP I/O mapping to J2 per PICMG 2.4 R1.0.

Electrical/mechanical interface:

- Supports single or double size IP modules.
- 32-bit IP modules are not supported.

IP Module I/O space, ID space, and INT space supported.

IP Module Memory space: Not supported.

Interrupts: Supports two interrupt requests per IP module and interrupt acknowledge cycles via access to IP INT space.

CompactPCI bus Compliance

Meets PCI spec. V2.1 and PICMG 2.0, R2.1.

Data transfer bus: Slave with 32-bit, 16-bit, and 8-bit data transfer operation. 32-bit read/write accesses are implemented as two 16-bit transfers to the IPs.

Interrupts: CompactPCI bus INTA# interrupt signal. Up to two requests sourced from each IP mapped to INTA#. Interrupts come from IP modules via access to IP module INT space.

32-bit memory space: Upon power-up, the system auto-configuration process (plug & play) maps the carrier's base address (for a 1K byte block of memory) into the PCI bus 32-bit memory space.

Environmental

Operating temperature: 0 to 70°C (AcPC8635 model) or -40 to 85°C (AcPC8635E model).

Storage temperature: -55 to 100°C.

Relative humidity: 5 to 95% non-condensing.

Power:

- +5V (±5%): 200mA maximum.
- ±12V (±5%): 0mA (not used).
- Plus IP module load.

MTBF: Consult factory.

Ordering Information

Industry Pack Carriers

AcPC8635: CompactPCI carrier. Holds two IP modules.

AcPC8635E: Same as AcPC8635 with extended temp. range.

Software (see Page 81)

IPSW-API-VXW: VxWorks® software support package

IPSW-API-QNX: QNX® software support package

IPSW-ATX-PCI: ActiveX®/OLE Controls 2.0 software package

IPSW-LINUX: Linux™ support (website download only)

Accessories (see Page 87)

5025-550: Cable, unshielded, 50-pin header both ends

5025-551: Same as 5025-550 except shielded

5025-552: Termination panel, 50-pin connector, 50 screw terminals

TRANS-C100: Transition module

